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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,755	08/21/2003	Wolfgang Lortz	238506US0X	7274
22850	7590	11/16/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER WEIER, ANTHONY J	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 11/16/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# **Advisory Action** **Before the Filing of an Appeal Brief**

Application No.

10/644,755

Applicant(s)

LORTZ ET AL.

Examiner

Anthony Weier

Art Unit

1794

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 November 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## **NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

## **AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because:  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s): \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_  
Claim(s) objected to: \_\_\_\_\_  
Claim(s) rejected: 1-12.  
Claim(s) withdrawn from consideration: 13-29.

## **AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

## **REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s): \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

Anthony Weier  
Primary Examiner  
Art Unit: 1794

Continuation of 11. does NOT place the application in condition for allowance because: the Field reference discloses the invention as claimed. The following analysis will better clarify the position taken by the Examiner, in particular with regard to the zeta potential and cation-providing compound/m<sup>2</sup> silicon dioxide surface limitations of the instant invention. In view of Example 1, Figure 1 shows that before the point where roughly 0.75 ml of the 2 M solution of  $Al_2(OH)_5Cl$  is added, the zeta potential is equal to or less than a value of 0. Determining the surface area of silicon dioxide available was as follows. There is 220 ml of the initial silicon dioxide solution which is 10% silicon dioxide and, therefore, roughly 22 g of silicon dioxide. Example 2 sets forth that the silicon dioxide used therein (and presumably in Example 1) has a surface area of about 300 m<sup>2</sup>/g. This means that the surface area from 22 g of silicon dioxide is 6600 m<sup>2</sup> (22 x 300). As for the  $Al_2(OH)_5Cl$  containing solution, there exists 2 moles per liter and, when the gradual addition of same to the silicon dioxide solution reaches 0.75 ml (the rough endpoint for a zero zeta value), about 0.00150 moles of  $Al_2(OH)_5Cl$  have been added to the solution. Since there are about 174 g of  $Al_2(OH)_5Cl$  per mole, the amount of  $Al_2(OH)_5Cl$  is calculated to be 0.261 g (0.0015 x 174). The final ratio of cation-providing compound to surface area of silicon dioxide is about 0.04 (261 mg  $Al_2(OH)_5Cl$  divided by 6600 m<sup>2</sup> surface area of silicon dioxide) wherein the value of 0.04 falls well within the range set forth in instant claim 1. Although the aqueous dispersion considered to meet the instant claims is within the process described in Example 1 of the Field reference, same exists, in particular, during the addition of the cation providing solution at the point where approximately 0.75 ml (or less) of same has been added.